

UEP 305 and 305A: Urban Data Analysis

Fall 2021

Lecture: Tuesdays and Thursdays, 1:30-2:55pm PST in Weingart 117

Lab: Tuesday or Thursday 3:15-4:40pm PST in Fowler 110

Professor Seva Rodnyansky (he/him/his) srodnyansky@oxy.edu

Office hours: Wednesday 10:15am - 12pm and Friday 12:30pm - 2:30pm at UEP - 1882 Campus Road #205. Sign-up [link here](#)

Teaching Assistant Jada Ho jho2@oxy.edu

Office hours: Monday 1-3pm

This Syllabus is subject to change throughout the semester. Students will be notified if the syllabus changes. The most updated copy is the one posted on Moodle.

Course Description: In this course, students will learn how to document and analyze urban and environmental problems and public policies using quantitative data. Quantitative data provide a compelling means by which we can understand the magnitude of urban problems and who is impacted by these problems across demographic groups, neighborhoods, cities, and countries. Quantitative data can also help identify solutions, including public policies, and then evaluate the effectiveness of those solutions. Ultimately, our task is to develop quantitative reasoning skills in order to mobilize facts in the pursuit of a more just and equitable urban society. In the words of urban geographer Elvin Wyly: "Get mad. Get data. Get to work." Or, as Daniel Patrick Moynihan once said: "You can't solve a problem until you first learn how to measure it."

Data is all around us. Using, interpreting, and understanding where it comes from is the core of numerous professions and pursuits in both the urban and environmental policy realms. This course reviews the basic foundations of statistics for social science applications. This will enable you to better understand and consume data and statistical information as well as producing statistical analyses yourself. Tools such as Microsoft Excel and Stata will be used to manage and analyze data. Through the group research project, you will put your ideas into action. UEP 305 will prepare you to conduct your senior comprehensive research projects and act as a stepping stone toward other courses focused on quantitative analysis.

Student Learning Outcomes:

1. Critically think about quantitative data: how it is used and where it comes from
- 2.

3. Understand the research design process from a social science perspective
4. Carry out a research project focusing on topics in urban and environmental policy
5. Assess key pieces of quantitative research using an equity lens

CPMS Core: UEP 305 fulfils the [CPMS core requirement](#).

Course Structure

- Two 1.5-hour lecture sessions each week
 - Most sessions in-person
 - A few sessions virtual – log in to Zoom for synchronous virtual lecture
 - A few sessions recorded – watch the recording at home
- One 1.5-hour lab session each week.
 - Attend your assigned lab day. If you have a conflict and need to attend the other lab day, email Prof. Rodnyansky and Jada.
 - Mixture of synchronous & asynchronous
- Office hours: both Prof. Rodnyansky and Jada will hold regular office hours. Use class time effectively to get your questions answered, especially since others may have the same questions as you.

Credit Hour Policy

UEP 305 is a 4-unit course with a 0-unit lab associated with the course. It is expected that students in this class will be devoting at least twelve (12) hours a week (including in-class time and in-lab time) on average.

Course Materials

- The current syllabus will be posted on Moodle.
- Textbook information & links are in the Texts and Software section below.
- **Other readings, assignments, and in-class worksheets will be posted on Moodle.**

LANE Online Statistics Education: A Multimedia Course of Study (<http://onlinestatbook.com/>).
Project Leader: David M. Lane, Rice University.

- Access here, free: <http://onlinestatbook.com/2/index.html>

I&D. Illowsky and Dean. Introductory Statistics. 2018.

- Access here, free: <https://openstax.org/details/books/introductory-statistics>
- Download here, free: https://d3bxy9euw4e147.cloudfront.net/oscms-prodcms/media/documents/IntroductoryStatistics-OP_i6tAl7e.pdf

Other readings & articles will be posted on Moodle.

[SOFTWARE]

- Bring your laptop to lecture and lab
- On your computer: Microsoft Excel, Word, Power Point.
- Available through Oxy lab via Parallels client: Stata
 - Install & test Parallels client access by Week 3. Scroll to Remote Computing in this link: <https://www.oxy.edu/offices-services/its/services/software>.
 - Also [available for purchase](#) for \$94/year.
- Other software: we will use some freeware toward the end of the semester

Course Requirements and Grading (covers both UEP 305 & 305A, together)

Participation and Attendance	10%
Problem Sets 1-5	25%
Midterm (take home)	25%
Group Project	
(3) timely & high quality drafts	15%
Group presentation	10%
Final paper	15%
	<u>40% total</u>
Final	20%

Participation and Attendance: I am not taking explicit attendance, it is up to you to show up to synchronous, asynchronous, and office hour sessions as you see fit. When you do attend, be ready and attentive. I may call on you during sessions Your questions are encouraged – it helps you learn, it helps others learn, and it helps me teach. There may be in-class activities in which you present your thoughts or work in progress. Your participation in the lab component is key as well, whether in small groups or in whole class portions. All of these things together account for the 10% participation grade.

Your health and well-being, and that of our community, are essential. If you are feeling any symptoms of illness, even if they are slight, please refrain from attending class until explicitly cleared by Emmons. Similarly, if you have a known exposure to someone who has tested positive for COVID-19, please do not return to class until Emmons confirms that you are cleared to participate in your usual activities.

Grading philosophy:

I care much more that students make a sincere effort and show their work, rather than just “get the right answer”. I take students’ work seriously and grading will reflect that. This is true across the various assignments in this class.

Grading rubric:

A: 93-100; A-: 90-93; B+: 87-90; B: 83-87; B-: 80-83; C+: 77-80; C: 73-77; C-: 70-73; D+: 67-70; D: 63-67; F: 0-63.

You will turn in all assignments on Moodle. Assignments should be turned in online, on Moodle, in Microsoft Word or Excel, PDF, or handwritten and scanned to a PDF.

You can work together on assignments (except Midterm and Final). However, each student is responsible for turning in their own assignment. Remember that working in a group does not necessarily mean you will get the right answer, or even a better grade.

For Group Project assignments, you will turn in one assignment per group, and each student will receive the group grade for that portion of the assignment.

All assignments are due by 1:30pm PST (class time) on the day they are due, unless noted otherwise.

Late Assignment Policy

Timely submission of assignments (including group project drafts) are crucial for UEP 305, since the material builds on itself. With the increased amount of digital communication and responsibilities for staff and faculty this semester, timely submission is even more crucial. Late assignments derail faculty’s ability to provide timely grading and necessary comments on your project drafts.

Late assignments should be posted to Moodle. They will be marked down one letter grade (e.g., from B to B-) for each 24-period that they are late.

I understand that things come up and especially this semester. If there is a health or medical issue, family emergency, or a similar situation, I recognize that these type of life issues can sometimes arise unexpectedly. If you are unable to turn the assignment in on time or attend a synchronous class, please communicate to me and we will work out

a plan. Similarly, if you must miss a synchronous class due to reasons of faith or conscience, please communicate with me as early in the semester as possible.

Assignment Return Policy

My commitment to you is to return graded assignments and post grades to Moodle within 1 week of receiving the assignments from you. If this has to change for some unforeseen reason, I will notify you.

List of Assignments and Deadlines

Assignments Overview	Upload to Moodle by 1:30 pm PST on:
Problem Set 1	Thursday, September 16
Problem Set 2	Thursday, September 30
Group Project Proposal	Thursday, October 7
Problem Set 3	Tuesday, October 19
Take Home Midterm Due	Tuesday, October 26
Group Project Descriptive Analysis draft	Tuesday, November 2
Problem Set 4	Tuesday, November 9
Group Project Methods and Results draft	Tuesday, November 16
Problem Set 5	Tuesday, November 23
Group Project in-class Presentations	Tuesday November 30 & Thursday December 2
Group Project Final Paper	Friday December 2, not considered late until Thursday December 9

9	10/26	In-Person	Statistical Tests and Hypotheses: z-test	Take-Home Midterm due
9	10/28	In-Person	Statistical Tests and Hypotheses: t-test	
9	Lab	In-Person	Stata: regression	
10	11/2	In-Person	Regression inference	

Signing the Academic Integrity Commitment at matriculation and at the beginning of

honesty and integrity. When signing the Integrity Commitment associated with work in a course, students are affirming that they have not cheated, plagiarized, fabricated, or falsified information; nor assisted others in these actions.

[Link](#) to Student Handbook (which includes the framing of the commitment, definitions of Academic Ethics, and Process for alleged violations of the commitment)

Title IX and Role of Faculty member as Mandatory Reporter ([Link](#) to Title IX)

In the event that you choose to write or speak about having experienced sexual misconduct, including sexual assault, dating violence, domestic violence, stalking, sexual exploitation or any other form of sexual and/or gender-based harassment, as a designated Responsible Employee, I must notify the Title IX Office. They will contact you to let you know about accommodations and support services at Oxy and reporting

to be absent from classes that conflict with the identified days. Information about this process is available on the ORSL website: <https://www.oxy.edu/office-religious-spiritual-life>

COVID-Specific Policy on Masks. Faculty have the option of stipulating that masks are required for a given course, even if local and College regulations at the time change as to no longer require universal indoor masking. If you wish to plan to require masks for the entire semester, you may wish to adapt the below statement and include it in your syllabus.

Students are expected to wear masks at all times during all indoor classroom activities.

Students should not eat or drink in class; please step outside if you need to remove your mask for even a brief period of time.

Classroom Responsibilities

Teachers and students share the responsibility of learning and teaching. I see my responsibility as creating the space and stimulating enthusiasm for learning, coming prepared to class, creating the goals and structure for a course, introducing concepts and ideas, and facilitating the sharing of knowledge amongst the students and between the students and myself. Students are responsible for attending and participating in class, completing assignments in a timely manner, and being prepared to discuss readings and material in class.

Classroom Community and Online Learning

UEP 305 is designed to facilitate a co-learning community of students, both informally in the classroom and formally through the Group Project. Students are responsible for engaging in respectful, open, and thoughtful discussion with each other and the professors; faculty are responsible for ensuring that discussions in the classroom are inclusive and productive.

As a student participating in an in-person and potentially online learning environment, you must abide by all College rules and regulations including, but not limited to, rules in the applicable course syllabus/outline, the Student Code of Conduct Policy, the Policy on Sexual Harassment and Discrimination, as well as any applicable laws. Any violation of these rules may lead to disciplinary action, up to and including expulsion from the College, and/or legal action.

Classroom Etiquette

In the classroom – in-person or digital – I commit to making myself as visible, audible, and legible as possible.

By coming to class, you signal that I am able to call on you or ask you a question about the course material during throughout the session. Students who join digitally have the option to keep their video on OR off during synchronous or asynchronous sessions.

However, the same principle applies – I can call on you whether your video is off or on. Similarly, in the digital realm, we will be using Chat, Breakout Rooms, Whiteboards, and Screen Sharing, among other features, for some of the activities in this course. By

